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REC'D 3 0 JUL 2004

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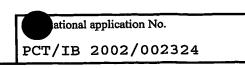
INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

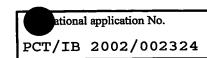
Applicant's or agent's file reference	FOR FORTHER ACTION		CT/IPEA/416			
207271/KCS/PJB/nlb	International filing date (da	v/month/vear)	Priority date (day/month/year)			
International application No.	1	<i>y,,,,,,,,,,,</i>				
PCT/IB 2002/002324	29-04-2002	DC .				
International Patent Classification (IPC)	or national classification and i	IPC .				
H04L 29/06						
Applicant						
Nokia Corporation et	al					
			is International Preliminary Examining			
This report is the international pr Authority under Article 35 and to	eliminary examination report ransmitted to the applicant ac	cording to Article	is International Preliminary Examining 36.			
2. This REPORT consists of a total	of 3 sheets, is	ncluding this cover	r sheet.			
3. This report is also accompanied to	by ANNEXES, comprising:					
a. (sent to the applican	at and to the International Bur	reau) a total of	4 sheets, as follows:			
S about of the	description claims and/or dr	awings which hav	e been amended and are the basis of this report			
and/or sheet	s containing rectifications aut	horized by this Au	uthority (see Rule 70.16 and Section 607 of the			
	ive Instructions).	which this Author	rity considers contain an amendment that goes			
beyond the	disclosure in the international	application as file	ed, as indicated in item 4 of Box No. I and the			
Supplement	al Box.					
b. (sent to the Internat	ional Bureau only) a total of ((indicate type and	number of electronic carrier(s))			
	containing	a sequence listing	and/or tables related thereto, in computer			
readable form only, Administrative Inst	as indicated in the Suppleme	ntal Box Relating	to Sequence Listing (see Section 802 of the			
		e.				
4. This report contains indications Box No. I Basis	of the report	5.				
Box No. II Priority Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability						
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	of unity of invention	25(2)	to povolty, inventive sten or industrial			
Box No. V Reason applie	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
	in documents cited		·			
Box No. VII Certa	in defects in the international	defects in the international application				
Box No. VIII Certa	in observations on the interna	tional application				
Date of submission of the demand		Date of completio	n of this report			
19-09-2003		23-06-200				
Name and mailing address of the IPEA	I	Authorized office	r			
Patent- och registreringsverke Box 5055			· · /			
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INTERNATIONAL PRESENTINARY REPORT ON PATENTABILITY



Box	No. I	Bas	is of the report					
1.	otherwi	se indic	the language, this report is based on the international application in the language this item.					
	This report is based on a translation from the original language into the following language which is the language of a translation furnished for the purposes of:							
			international search (under Rules 12.3 and 23.1(b))					
		Ħ	publication of the international application (under Rule 12.4)	1				
			international preliminary examination (under Rules 55.2 and/or 55.3)	•				
2.	furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as conginally flew and are not annexed to this report):							
	Ц	the inte	rnational application as originally filed/furnished					
	\boxtimes		cription:	as originally filed/furnished				
		pages	1-20 received by this Authority on					
		pages*						
	\boxtimes	the clai		as originally filed/furnished				
		pages pages*	as amended (together	with any statement) under Article 19				
			21-24 received by this Authority on _					
		pages*						
	\boxtimes	the dra	wings:					
	لاسكا		1-7	as originally filed/furnished				
		pages*						
		pages*						
		a sequ	ence listing and/or any related table(s) - see Supplemental Box Relating to Se	quence Listing.				
3.		The ar	nendments have resulted in the cancellation of:					
			the description, pages					
			the claims, Nos.	•				
		\sqcap	the drawings, sheets/figs					
		\sqcap	the sequence listing (specify):					
			any table(s) related to the sequence listing (specify):					
4.		This r made, 70.2(c	report has been established as if (some of) the amendments annexed to this since they have been considered to go beyond the disclosure as filed, as ince;)).	report and listed below had not been licated in the Supplemental Box (Rule				
1			the description, pages					
			the claims, Nos.					
			the drawings, sheets/figs	•				
			the sequence listing (specify):					
			any table(s) related to the sequence listing (specify):					
*	If iten	n 4 appl	ies, some or all of those sheets may be marked "superseded."					

INTERNATIONAL PREDIVINARY REPORT ON PATENTABILITY



Box No. V	Reasoned statement un citations and explanati	nder Article 3 ons supporti	5(2) with regard to novelty, inventive step or industrial applicability ng such statement	;
1. Staten	nent			
Ŋ	ovelty (N)	Claims Claims	1-21	YES NO
Ir	ventive step (IS)	Claims Claims	1-21	YES NO
Ir	ndustrial applicability (IA)	Claims Claims	1-21	YES NO

2. Citations and explanations (Rule 70.7)

D1: "Stream Control Transmission Protocol" R. Stewart 2000 October.

D2: "TLS over SCTP" Jungmaier A. 2001 14 Nov.

The objective of the invention is to provide a communication between two entities without requiring the fifth adaptation layer.

D1 discloses the SCTP format. The format includes source port and destination port, which distinguish between connections. This is information that concerns the connection and thereby when sent to entities connection information is transferred between the entities.

D2 discloses SCTP signalling, wherein the signalling further contains TLS. The TLS involves handshaking between the entities.

D1 is considered to be the closest state of the art.

The cited documents represent the general state of the art. The invention defined in claims 1-21 is not disclosed by any of these documents.

The cited prior art does not give any indication that would lead a person skilled in the art to the claimed system, entity and method to include port number and connection identity information in a SCTP packet. Therefore, the claimed invention is not obvious to a person skilled in the art.

Accordingly, the invention defined in claims 1-21 is novel and is considered to involve an inventive step. The invention is industrially applicable.

CLAIMS

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- 1. An internet protocol based system comprising a plurality of entities, at least two of said entities being arranged to use SCTP for signalling therebetween, said SCTP signalling comprising connection identity information relating to a connection between at least two of said entities.
- 2, A system as claimed in claim 1, wherein said connection identity information comprises address information.
- 3, A system as claimed in claim 2, wherein said address information identifies at least one other further entity.
- 4. A system as claimed in claim 1 or 2, wherein said connection identity information comprises information identifying an application.
 - 5. A system as claimed in claim 1, wherein said connection identity information identifies a connection flow.
- 20 6. A system as claimed in any preceding claim, wherein said connection identity information is provided in an SCTP packet.
 - 7. A system as claimed in claim 6, wherein said connection identity information is provided in the data chunk part of the SCTP packet.
 - 8. A system as claimed in claim 7, wherein said connection identity information is provided in a payload protocol identifier field.

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- 9. A system as claimed in claim 7, wherein said connection identity information is provided in a field between a stream sequence number field and user data.
- 10. A system as claimed in claim 6, wherein said connection identity information is5 provided in a header for the SCTP packet.
 - 11. A system as claimed in any of claims 6 to 10, wherein said address information is provided in a separate field in said SCTP packet.
- 10 12. A system as claimed in any preceding claim, wherein at least one of the two entities is arranged to provide further address information relating to at least one of said two entities.
- 13. A system as claimed in any of the preceding claims, wherein at least one of said two entities comprises means for sending and/or receiving SCTP packets to and/or from the other of said two entities.
 - 14. A system as claimed in any preceding claim, wherein at least one of said two entities comprises means for setting up SCTP associations.
 - 15. A system as claimed in any preceding claim, wherein at least one of said two entities comprises means for receiving status information relating to SCTP associations.
- 25 16. A system as claimed in any preceding claim, wherein at least one of said two entities comprises means for forwarding SCTP packets to a radio network layer in dependence on said connection identity information of said further entity.



- 17. A system as claimed in any preceding claim, wherein at least one of said two entities comprises means for adding said connection identity information of said further entity to a SCTP packet.
- 5 18. A system as claimed in any preceding claim, wherein said further entity comprises at least one of the following:
 - -user terminal,
 - -user,
 - -group of users,
- 10 -service,

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- -network, or part of network,
- -server, or
- -cell or base transceiver station.
- 15 19. A system as claimed in any preceding claim wherein one of said entities is one of the following:

base station; controller; radio network controller; core network; radio network access server; gateway or server

and the other of said entities is one of the following:

base station; controller; radio network controller; core network; radio network access server; gateway or server

- 20. A method for use in an internet protocol based system comprising a plurality ofentities, comprising the steps of:
- sending SCTP transport signalling information between two of said entities, said SCTP signalling information comprising connection identity information relating to a connection between said two entities.

21. An entity for use in a internet protocol based system, said entity comprising means for sending to another entity an SCTP transport packet, said entity being arranged to include in said packet connection identity information relating to a connection between at least two of said entities.

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